## COLORADO RIVER RECOVERY PROGRAM PROGRAM FY-99 ANNUAL PROJECT REPORT

**RECOVERY** 

PROJECT # 19H

I. Project Title: General Hydrology Support for Water Acquisition Activities.

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III. Project Summary:

The Service's Division of Water Resources provides support activities undertaken by the Water Acquisition Committee (WAC) and the Recovery Program Director in the area of water acquisition, water scheduling and coordination. WAC support includes chairing the WAC, preparing agendas, preparing meeting summaries, developing Scopes of Work, preparing Annual Reports, and working on WAC related projects. Other major tasks included participation in special projects like Grand Valley Water Management, Coordinated Reservoir Operations, Yampa River Operation and Management Plan, and scheduling reservoir releases for flow support in the 15-Mile Reach and Yampa river.

- IV. Study Schedule: Ongoing
- V. Relationship to RIPRAP:

Colorado River Action Plan, Mainstem:

Deliver flows to the 15-Mile Reach

I.A.3.c.(3)., I.A.3.c.(3)(c) and (f) Yampa River Action Plan

I.A.4.a.(3) Yampa River Management Plan &

I.A.4.a.(I)(b) Steamboat Lease

- VI. Accomplishments of 1999 Tasks and Deliverables:
  - A. Gage Installation and Maintenance:

Water Rights Acquisition Committee Administrative Work: Scopes of Work and contracts were developed for the operation of the Palisade Gage, two gages on the Yampa River and two gages on the Duchesne River. The gages on the Colorado River and Yampa River were funded cooperatively by

the Recovery Program, the Colorado Division of Wildlife and USGS. The two gages on the Duchesne River were funded cooperatively by the Recovery Program the Central Utah Water Conservancy District and USGS. Matching funds for the gages were provide from non federal funds which are held by the National Fish and Wildlife Foundation.

B. Hydrology Support for Water Acquisition activities:

Assistance was provided to the Recovery Program Director in development of criteria for Ruedi releases, and coordination of the annual public meetings. The year 1999 was a year when spring peak flows were low followed by a wet summer and early fall. The Service Water Resources staff participated in the following activities in support of meting service flow recommendations on the Colorado, Green and Yampa Rivers.

- 1. During the late summer flows in the 15-Mile Reach were monitored on a daily basis and weekly conference calls were held to coordinate releases from Ruedi, Green Mountain and Wolford Dillion, Williams Fork, and Gramby Reservoirs. Flows in the 15-mile Reach remained above Service recommendations of 1,630 cfs all of the summer with flow support from participating reservoirs. The final accounting is yet to be completed but preliminary estimates are that 42,500 20,400 and 6,000 Acre feet of water were provided from Green Mountain, Ruedi, and Wolford Reservoirs. Data is not yet available for Dillion, Williams Fork, and Gramby Reservoirs. The use of water for flow support will be documented in the Services annual report to CWCB in March of 2000.
- 2. Yampa River flows were monitored closely and dropped relatively low by the end of summer but did not drop below Service flow targets of 150 cfs in August, 110 cfs in September and 115 cfs in October. Water was released between October 1 and October 20 from Steamboat Lake under the take or pay lease with the Colorado Division of Parks.
- 3. The geomorphology peer review panel was supported and the panel was used to review 2 important program reports. The panel has not functioned well and the WAC has discussed options for expanding the panel an a case by case basis

depending on the types of reports to be reviewed.

C. Yampa River Reservoir Studies:

Yampa Operation and Management Plan: The Division of Water resources staff participated in the team effort to develop low flow recommendations for the Yampa River.

D. Coordinated Reservoir Operations:

Assistance was provided to the Bureau of Reclamation and CW CB staff in developing the coordinated reservoir annual operation plans with and without coordination. Once the plan for coordination was competed, it was presented at two sets of public meetings. Staff from Water Resources representing the Service/Recovery Program presented information on the Recovery Program and the need for high spring flows periodically. The year 1999 was a year when coordination was identified to be of benefit and a full scale coordination effort commenced. Water Resources staff participated in biweekly meetings and conference calls to facilitate coordination and made the final decision on when to commence coordination. During the spring runoff period the flows were monitored constantly in cooperation with the Loveland and Grand Junction offices of Bureau of Reclamation, Denver Water, CBT the River District, the Division Engineer and the National Weather Service. Coordination began on June 3 and continued through June 10. During this period a maximum daily augmentation of 2,356 cfs was added to flows in the 15 Mile Reach. the final analysis, 38,800 acre feet of water was added to the spring peak in the 15 mile reach. The allocation of water for flow enhancement will be documented in the CWCB 1999 Coordinated reservoirs report. The benefit of the flows to habitats in the 15 and 18 mile reach is covered in the 15-Mile Reach Channel Monitoring report, annual

E. General Support Activities:

VIEW GRAPH

report #85.

Served as Chairman of the Water Acquisition Committee where the following tasks were performed: 1) prepared meeting summaries for all WAC meetings and reports to the Management Committee, 2) prepared annual reports to the Colorado Water Conservation Board on Ruedi flows and associated benefits to the 15-Mile Reach, and 3) prepared Scopes of Work and annual reports for the following projects:

- 1. Water Right Consultant Services
- 2. Palisade gage operation and maintenance
- 3. Steamboat Lake water lease
- 4. Yampa/Green Sediment Sampling
- 5. Water acquisition Hydrology Support
- 6. Basin wide Channel Monitoring
- 7. 15-mile Reach Channel Monitoring
- 8. Peer review of Geomorphology
- 9. Yampa Gages
- 10. Duchesne Gages

As chairman of the WAC I serve as coordinator for Grand Valley Water Management, Redlands Gage, Coordinated Reservoirs and the three CWCB projects. Many of the tasks included attending meetings, reviewing reports, providing comments, and reporting to the Service and WAC.

- VII. Recommendations:
- VIII. Project Status: The project is ongoing and changes each year to meet the changing objectives of the Recovery Program in securing, protecting and delivering water for endangered fish habitat.
  - IX. FY-99 Budget

A. Funds provided: \$47,500
B. Funds expended: 47,500
C. Difference: \$ 0

- X. Status of Data Submission: Not applicable.
- XI. Signed: George Smith December 7, 1999.

  Principal Investigator Date

APPENDIX: Reports, on water right evaluations, and return flow analysis produced by the water rights consultant were submitted to the WAC. An annual report is produced on the benefits of Ruedi release for endangered fish each year by March 1, 2000. The U.S. Geological Survey publishes flow data from the Palisade gage in the annual water resource papers.

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